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EXAMINER	
SOUAYA, JEHANNE E	

ART UNIT	PAPER NUMBER
1634	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/444,388	HIBINO ET AL.	
	Examiner	Art Unit	
	Jehanne E Souaya	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *24 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-8 and 10-15* is/are pending in the application.

4a) Of the above claim(s) *6 and 7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,10-13 and 15* is/are rejected.

7)☒ Claim(s) *14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Currently, claims 6-8 and 10-15 are pending in the instant application. Claims 6-7 have been withdrawn from consideration as drawn to non elected inventions. Claims 8 and 10-15 are currently under consideration. All the amendments and arguments have been thoroughly reviewed but are deemed insufficient to place this application in condition for allowance. The rejections under 35 USC 112 from the previous office action are moot in view of the amendments to the claims. The following rejections are newly applied, necessitated by amendment. They constitute the complete set being presently applied to the instant Application. Response to Applicant's arguments follow. This action is FINAL.

New Grounds of Rejection

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 8, 10-12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (Plant Molecular Biology, vol. 24, pp 603-615; 1994; hereinafter referred to as Phillips) in view of Wigler et al (US Patent 5,436,142, 1995, hereinafter referred to as Wigler) and Frazer et al (Journal of Immunological methods, vol. 207, p 1-12, 1997; hereinafter referred to as Frazer) and Pinyopusarerk.

The amended claims are drawn to a method for identifying a DNA fragment for polymorphic forest tree plants comprising the following steps: a) selecting two sibling individuals of a plant having different phenotypes, b) obtaining genomic DNA from the two individuals, c) selecting DNA fragments by a genome subtraction between the genomic DNA of the two individuals, d) providing a labeled cDNA probe that has been obtained from total mRNA of both individuals, e) fractionating the DNA fragments obtained by step c and screening the DNA fragments with the RNA derived labeled probe of step d, f) performing intra-individual subtraction with genomic DNA from one of the two individuals, and g) comparing the DNA fragments of steps e and f to exclude the DNA fragments containing intra-individual polymorphisms and identifying the DNA fragments that polymorphic between the individuals.

Phillips teaches a subtraction cloning scheme for Arabidopsis thaliana, which resulted in the isolation of differentially regulated cDNA (see abstract). The method of Phillips involves isolating total mRNA from plant material (p. 604), followed by subtractive hybridization using excess 'driver' poly(A)+ RNA form control treated plants with first strand cDNA from GA

treated plants to generate polls of either GA induced or GA repressed sequences (see p. 605, co. 1). Phillips teaches that clones representing mRNA changed in abundance by GA were selected from enriched libraries by differential hybridization (see p. 607, col. 1 "Identification of GA-regulated clones)[steps a-c of claim 8]. Phillips teaches that the probes for differential hybridization were generated form single stranded cDNA obtained from poly(A)+ mRNA (p. 607, co. 1). Although Phillips does not teach using polyA+ mRNA from both individuals, Phillips does teach obtaining it from the GA-treated or control sample, therefore it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have used polyA+ (total) mRNA from both samples as such would save time from having to do so with one individual sample at a time [step d of claim 8]. Phillips teaches that the single stranded cDNA remaining after subtraction was converted to double stranded DNA by primer extension and amplified by PCR and that agarose gel electrophoresis (fractionating DNA fragments in step e of claim 8) revealed that the size range of PCR products was 100-600 base pairs (p. 608, col 2, first full para). Although Phillips does not teach using acrylamide gel electrophoresis (claim 15) to fractionate DNA fragments, it would have been obvious to one of ordinary skill in the art at the time the invention was made that acrylamide gel electrophoresis and agarose gel electrophoresis were equivalent methods of separating DNA fragments. Phillips teaches that differential hybridization of duplicate dot blots of 600 random clones from the enriched cDNA libraries with labeled probes derived from mRNA from GA-treated and control shoots (screening the DNA fragments with RNA derived probe from step e of claim 8) identified only 3-5% strongly hybridizing clones, demonstrating the successful subtraction of abundant DNA species (identifying DNA fragments that are polymorphic between the individuals, step g

of claim 8). Phillips teaches that the technique was used to identify two genes whose corresponding mRNA accumulate 24 h after application of GA3 to plants of the Arabidopsis thaliana GA-deficient dwarf mutant ga1 (p. 613, col. 1, "Discussion").

Wigler uses a specific genome subtraction method called RDA to identify DNA sequence differences between very closely related genomes. Wigler teaches that it is useful to be able to detect particular DNA sequences that have a function or affect a function of cells, for use in breeding, for example (see col. 1, .lines 20-23). Wigler teaches methods for representational difference analysis (RDA) between two sources of DNA (see col. 2, lines 28-30). Wigler teaches that the method finds use in a variety of situations, such as in determining the presence or absence of particular DNA sequences, particularly associated with recessive or dominant traits (col 2, lines 57-60). Wigler teaches that in such a situation, one can compare two related sources (step a of claim 8) of DNA to determine whether they share the particular sequence, where the sequence can be coding or non coding (col 2, lines 60-64) (encompasses genomic DNA, step b of claim 8). Wigler teaches that the method involves the isolation of DNA, where the DNA can be from any source, including plants (see col. 3, lines 47-51). Wigler teaches that in the first stage, DNA is isolated and digested to produce fragments (col. 3, lines 61-65). Wigler teaches that subtractive and kinetic steps are employed in the next stage, in a single operation of hybridization and amplification, which, after several rounds, produces enrichment of target DNA (col. 4, lines 29-65) (step c of claim 8). Wigler teaches that resulting DNA can be used as probes to identify sites that differ (col.5). Wigler teaches that such analysis can be used to define sequences that are present in one member of a family and not in another (see col. 6, lines 1-15). In example 2, Wigler specifically teaches analysis of DNA from two individuals resulting in the

detection of a small number of differences between two nearly identical genomes (identifying the DNA fragments that are polymorphic between the two individuals; step 8g).

Therefore, given the combined teachings of Wigler and Phillips the ordinary artisan would have learned that it was possible to 1) identify DNA sequences related to specific traits that were present in one genome and not in the genome of another individual using genome subtraction, and more specifically RDA, 2) that this method could be used in plants, and 3) that this method could be used to differentiate DNA from closely related genomes, such as genomes in the same family (Wigler, col. 3, lines 52-60), and 4) that genome subtraction was successfully used to isolate DNA sequences related to a specific condition in plants (teachings of Phillips). Therefore it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made that it was possible to screen related plant individuals, such a siblings, to isolate DNA fragments that were associated with a trait found in one individual and not the other as Wigler teaches that RDA is an efficient and useful method for such situations. The genome subtraction method of Phillips to isolate DNA sequences related to a specific condition in plants would have provided a specific example of a genome subtraction method that was an effective way to isolate DNA sequences of interest (related to a specific condition) in plants. The RDA method of Wigler and the genome subtraction method of Phillips use the same sequence of steps except that the RDA method taught by Wigler uses multiple rounds of enrichment (2-4- see col. 5, lines 30-31) and specifies specific ratios of concentration for driver and tester DNA sequences to ensure the most complete and sufficient enrichment (see col 4, lines 41-59) whereas the genome subtraction of Phillips teaches a single round of enrichment and does not specify ratios of driver and tester sequences. However, it would have been obvious to one of ordinary skill in

the art, at the time the invention was made given the teaching of successful isolation of sequences of interest taught by both Wigler and Phillips, that either method of genomic subtraction (taught by Wigler or Phillips) was effective and that the extra rounds of enrichment and specific ratios of tester and driver sequences taught by Wigler were preferred as Wigler teaches that such provides a more efficient enrichment of DNA sequences of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the genomic subtraction portion of the method of Phillips, that is genomic subtraction and DNA sequence identification, with the specific RDA method of Wigler (claim 12), as the RDA method of Wigler would have provided a more complete method of genome subtraction. It would have further been prima facie obvious to one of ordinary skill in the art at the time the invention was made that the method of Phillips and Wigler could be used to isolate sequences related to specific traits in one individual and not in another related individual as Wigler teaches such and further teaches that such is useful in methods of breeding, for example. Although Phillips does not teach using genomic DNA, it would have also been prima facie obvious to one of ordinary skill in the art at the time the invention was made that the method of Phillips could be carried out using genomic DNA as Wigler teaches that either coding or non coding DNA can be used, and that any sequence may be used such that it will be inherited in association with DNA sequences associated with the trait (see col. 2, lines 62-64).

It is noted that the method of Phillips and Wigler do not teach a control step that includes an intra-individual subtraction step, however Frazer et al teach that control for RDA experiments are important due to the many manipulations of templates where cross contamination can occur and further teaches that the simplest case involves a tester being subtracted against a driver

generated from identical material in order to ascertain the degree to which RDA is able to effectively deplete all sequences common to both pools (see p. 8, col. 2, lines 1-11). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Phillips and Wigler by adding a control step as taught by Frazer because Frazer teaches that such control experiments are needed for RDA experiments. The ordinary artisan would have been motivated to use the intra individual genome subtraction taught by Frazer because Frazer teaches that it is the simplest control step.

Although Phillips does not teach a plant that is a forest tree and specifically acacia auriculiformis (claims 8, 10 and 11), Pinyopusarerk teaches that the Royal Forest Department of Thailand revised the species of acacia auriculiformis to be used in its reforestation program and that subsequently tree improvement programs have been planned for the species (see p. 147, col. 1). Pinyopusarerk teaches that the improvement program was started with some specific objectives including 1) improve qualities of the species (eg. stem form) through selection and breeding and 2) produce genetically improved seed and other plant material for plantation establishment. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to identify, for example, a breeding marker for ie: stem form for acacia auriculiformis, using the methods taught by Phillips in view of Wigler and Frazer as Phillips teaches the successful identification of genes with a specific phenotype. The ordinary artisan would have been motivated to use the method of Phillips in view of Wigler and Frazer to identify a breeding marker for stem form for acacia auriculiformis as Pinyopusarerk teaches a need for improving the quality of the species.

Response to Arguments

The response traverses the rejection. The response asserts that Phillips does not teach or suggest the use of inter-individual subtraction with genomic DNA. This argument has been thoroughly reviewed but was not found persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Further, as stated in the previous office action and the rejection set forth above, although Phillips does not teach using genomic DNA, it would have also been prima facie obvious to one of ordinary skill in the art at the time the invention was made that the method of Phillips could be carried out using genomic DNA as Wigler teaches that either coding or non coding DNA can be used, and that any sequence may be used such that it will be inherited in association with DNA sequences associated with the trait (see col. 2, lines 62-64). The response further asserts that Phillips does not teach inter-individual genome subtraction using DNA from sibling individuals and Wigler does not specifically teach genome subtraction of sibling individuals from within the same family. The response further asserts that Wigler does not provide any motivation to modify the method of Phillips in order to select a gene much less a polymorphic form of a gene by subtracting genomic DNA between sibling individuals.
This argument has been thoroughly reviewed but was found unpersuasive. As explained in the previous office action and the rejection set forth above, although Phillips does not teach genome subtraction between siblings, Wigler teaches that genome subtraction can be used on members of a family to identify differences in sequences between two members of a family (see col. 6, lines

12-15). Further, the teachings of Wigler illustrate the different applications that can be used in methods of RDA analysis, for example using genomic DNA and detecting differences between members of a family, which would easily be combinable with the method taught by Phillips to make the method of Phillips more versatile. The response's assertion that Wigler teaches genomic subtraction between members of different families is not understood as Wigler specifically teaches, as stated previously, that the method is useful in defining sequences which are present in one member of a family and not in another and that in this way one may then compare other members of the family as to whether they carry the same DNA or if it is absent (col. 6, lines 11-15). This teaching of Wigler is specifically drawn to members within a family. Further, Wigler contemplates that tester/and or driver DNA can, for example, derive from identical twins (see col. 3, lines 35-36).

The response further asserts that Wigler, either individually or in combination with Phillips, does not teach the invention as a whole. This argument was not found persuasive because the rejection set forth above and in the previous office action did not reject the invention as a whole as being obvious over Wigler alone, Phillips alone, or Philips in view of Wigler, but also in view of Frazer and Pinyopusarerk. Further, the rejection in the previous office action and the rejection above, specifically outlined the teachings of each reference and how they related to each step of the instantly claimed method. The response asserts that Frazer discloses subtracting a tester sample from a driver sample, each generated from identical material, in order to ascertain the degree to which RDA is able to effectively deplete all sequences common to both pools whereas the purpose of the intra individual subtraction step of step f is designed to eliminate self heterogeneity. The response urges the examiner to take note of the fact that genomic

heterogeneity can occur within a single forest tree plant, and that eliminating any intra individual background genomic variation is critical to the accuracy and sensitivity of the method. This argument has been thoroughly reviewed but was found unpersuasive. The recitation of "intra individual subtraction" is interpreted to encompass driver and tester from the same material, which is taught by Frazer. Although Frazer teaches that the control step should be used to determine that RDA is able to effectively deplete all sequences common to both pools, Frazer provides the ordinary artisan with motivation to add a control step to the method of Phillips in view of Wigler, and would result in a method encompassed by the claims of the instant invention. Frazer specifically teaches that the control step of Frazer should in theory, not result in any differences, however, Frazer teaches a need for conducting the control step. In applying this step to the method of Phillips in view of Wigler, to determine polymorphisms between sibling individuals, the ordinary artisan would have recognized that differences indicated in the control step would need to be accounted for to accurately determine polymorphisms between individuals. Although the motivation for using the step as taught by Frazer is different from why the step is included in the instantly claimed invention, the motivation to use the step need not be the same. See MPEP 2144 which states:

> The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991) (discussed below). Although Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993) states that obviousness cannot be established by combining references "without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done" (emphasis added), reading the quotation in context it is clear that while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention.

The response asserts that as a secondary reference Pinyopusarerk does not cure the deficiencies of the forgoing references alone or in combination. This argument has been thoroughly reviewed but was found unpersuasive. As stated in the previous office action and the rejection set forth above, Wigler teaches that it is important to be able to detect particular DNA sequences which have a function or affect a function of cells, for example, in breeding, and teaches that RDA can be used for such purposes (see col. 1). As Wigler teaches that RDA can be used in plants and Phillips specifically demonstrates a method using subtractive hybridization, with the same sequence of steps as taught by Wigler, in plants to determine DNA sequences associated with phenotypic differences in plants, it would have been obvious to the ordinary artisan at the time the invention was made that the method of Phillips in view of Wigler and Frazer (teaches the need for a control step) could be used for example, to detect breeding markers in plants. Although Phillips in view of Wigler and Frazer do not specifically teach use for the method with forest tree plants, or specifically Acacia auriculiformis, Pinyopusarerk teaches that the Royal Forest Department of Thailand revised the species of acacia auriculiformis to be used in its reforestation program and that subsequently tree improvement programs have been planned for the species (see p. 147, col. 1). Pinyopusarerk teaches that the improvement program was started with some specific objectives including improving qualities of the species (eg. stem form) through selection and breeding. Although Pinyopusarerk does not teach improvement through the detection of specific breeding markers using RDA, it would have been prima facie obvious to the ordinary skilled artisan at the time the invention was made that RDA could be used to detect breeding markers associated with desirable traits that would be useful in methods of improving qualities of the Acacia auriculiformis, as Wigler teaches that by being able

to detect particular DNA sequences which have a function or affect a function of cells, one can monitor pedigrees, and that in animals for example, one can follow the inheritance of particular sequences associated with desirable traits. It would have been immediately obvious to the ordinary artisan that such methods could be used to monitor plant breeding as well, and the ordinary artisan would have been motivated to use the improved RDA method of Phillips in view of Wigler and Frazer to detect DNA associated with desirable phenotypic properties for acacia auriculiformis as Pinyopusarerk teaches that improvement programs are needed to improve the quality of acacia auriculiformis. Although the preamble of amended claim 8 no longer recites "obtaining a fragment for a breeding marker", the instantly claimed method could be used to detect breeding markers. The ordinary artisan would have had a reasonable expectation of success that the method of Phillips in view of Wigler and Frazer and Pinyopusarerk would be capable for detecting DNA differences between closely related plants given that Wigler specifically teaches that RDA can be used for such purposes and also teaches that detecting DNA differences is important in breeding to be able to follow the inheritance of particular sequences associated with desirable traits, and Phillips teaches a method for detecting DNA in plants associated with specific phenotypes using genome subtraction. For these reasons, and the reasons made of record above, the rejection under 35 USC 103 is maintained from the previous office action.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Wigler, Frazer et al (Journal of Immunological methods, vol. 207, p 1-12, 1997) and

Pinyopusarerk as applied to claims 8, 10-12 and 15 above, and further in view of Nainan et al (Journal of Virological Methods, vol. 61, pp 127-134, 1996, hereinafter referred to as Nainan).

The teachings of Phillips in view of Wigler and Frazer and Pinyopusarerk are outlined above. Although Phillips in view of Wigler and Frazer and Pinyopusarerk do not teach using labeled cDNA labeled with digoxigenin, Nainan teaches a simple system to detect PCR products that has the sensitivity and specificity of nested PCR primer PCR which involves digoxigenin labeled PCR products which can be identified with antidigoxigenin antibodies. Therefore, it would have been prima facie obvious to one of ordinary skill in the art to label the cDNA of the method of Phillips with digoxigenin for the purposes of specifically detecting the cDNA. The ordinary artisan would have been motivated to label the cDNA taught by Phillips with digoxigenin as Nainan teaches that it provides sensitivity and specificity.

Response to Arguments

The response traverses the rejection and states that Nainan does not cure the deficiencies with respect to Phillips, Wigler, Frazer, and Pinyopusarerk. This argument has been thoroughly reviewed but was found unpersuasive for the reasons set forth in the "Response to arguments" as applied to claims 8, 10-12, and 15 above, and in the rejection of claim 13, also set forth above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Claim 14 is objected to for being dependent on a rejected claim.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jehanne Souaya whose telephone number is (703) 308-6565. The examiner can normally be reached Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for this Group is (703) 305-3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jehanne Souaya

Jehanne Souaya
Patent examiner
Art Unit 1634

5/14/03